## **REMARKS**

Reconsideration of the application is respectfully requested.

Claims 1-30 stand rejected as being directed to non-statutory subject matter, where the language of the claims allegedly raises a question as to whether the claims are directed merely to an abstract idea not tied to a technological art. As to independent claims 1 and 17, these independent claims now recite methods that are machine-implemented. Also, independent claim 15 is directed at a machine-readable medium that contains instructions which cause a machine to perform the recited acts. Those claims as amended here are tangibly embodied in the performance of a machine, and as such are not directed to merely abstract ideas. Reconsideration and withdrawal of the non-statutory subject matter rejection is respectfully requested.

Turning now to the art rejections, claims 1-47 stand rejected as being anticipated by U.S. Patent No. 6,467,052 to Kaler ("Kaler"). According to the Office Action beginning at page four, <u>Kaler</u> discloses the operations of Applicants' claim 1 in their entirety. Applicants respectfully disagree, because although <u>Kaler</u> describes analyzing the performance of a data processing system, using tools for analyzing an application that is running on the system, <u>Kaler</u> does not teach or suggest *prioritizing performance* data for a subcontext using predetermined criteria, obtaining an insight for a subcontext based on the prioritized performance data, and obtaining advice associated with that insight.

For example, the Office Action at page four analogizes <u>Kaler's</u> filters and filter reduction (Figs. 8-10 and column 23 line 14 to column 26 lines 31) to Applicants' claimed *context* and *subcontexts*. Assuming that as true, <u>Kaler</u> makes no mention of *prioritizing* performance data for a subcontext using predetermined criteria. The Office Action at the bottom of page four refers to column 14 lines 8-50 ("user-specified filtering") and several other areas of <u>Kaler</u> as allegedly teaching this limitation. However none of the sections of <u>Kaler</u> refer to *prioritizing* filter reduction.

<u>Kaler</u> refers to "predetermined heuristics" as being used for temporal and contextual information, to "deduce a call tree". However this does not teach or suggest *prioritizing performance data for a subcontext*. The term "prioritizing" refers to listing or

rating in order of priority that is superiority in rank, position or privilege. For example, Applicants' specification gives the example that the predetermined criteria may be running time, such that performance data is prioritized in order according to running time. Thus, a program with a running time of three seconds for example will be listed before a program having a running time of two seconds. This helps the programmer to easily identify which program spent the most time on a given system. In an alternative embodiment, the criteria may be the greatest number of clockticks, the greatest number of retired instructions, or other criteria. No such prioritization is taught or suggested in <u>Kaler</u>.

Applicants' claim 1 is also not anticipated by <u>Kaler</u>, because <u>Kaler</u> does not disclose or suggest obtaining an insight for a subcontext based on the prioritized data and obtaining an advice associated with that insight. In Kaler, a tool is described which provides additional insight into application performance. For example, a timeline window presents a visual representation of the timing of all related events, where spaces in Fig. 17 represent possible under utilization of resources. Although this may allow users to visually identify potential system wide and per machine bottlenecks, Kaler does not disclose obtaining an advice associated with that insight. Indeed, Applicants' claim 1 refers to a first tool to obtain the performance data, and a second tool to obtain the insight and provide advise associated with that insight. For example, the advice may be a description of what should be done in response to the insight. Insight for a particular module may be "frequent L1 data cache misses". Such an insight suggests that the working data set fits in an L2 cache but not in a L1 cache. The advice obtained for this insight may therefore be "if possible, reduce the working data set so that it fits in the L1 cache." Thus, the *advice* suggests possible solutions, to the user of the second tool, to either change the programming of the software or its compiler options, to alleviate the problem indicated by the *insight*. Kaler does not teach or suggest integrating such expert system capability of providing advice on appropriate strategies, for improving the performance of a code region. Accordingly, for all of the above reasons, reconsideration and withdrawal of the anticipation rejection of claim 1 is respectfully requested.

042390.P12169 11 09/912,173

Independent claim 15 recites a storage medium that has instructions which when executed by a machine perform a method whose operations are similar to some of those mentioned above in support of claim 1. A similar situation exists in claim 17 and in claim 31. Accordingly, these claims are submitted as not being anticipated by <u>Kaler</u>, for at least the same reasons as given above in support of claim 1.

Claim 33 recites a system in which a first tool is to obtain performance data about a system, and prioritizer is to prioritize the performance data for a subcontext using predetermined criteria. A second tool obtains an insight for a subcontext based on the prioritized performance data and an advice associated with that insight. The capabilities of these tools are as explained above in connection with claim 1 are not taught or suggested by Kaler.

Nevertheless, the claims are amended here to recite a more particular embodiment of the invention. Support for the amended language can be found in the specification as filed, paragraph 22. Accordingly, no new matter has been added. The amended claims remain neither anticipated or obvious in view of Kaler, for at least the reasons given above in support of claim 1. In addition, as to claim 1, Kaler does not teach or suggest a methodology which obtains performance data about the same software as run on a plurality of systems, using a first tool, sorts the performance data for each of the systems by a number of contexts, each context divided into a number of subcontexts, and automatically prioritizes the performance data for a subcontext. Insight for a subcontext based on the prioritized data is obtained using a second tool, as well as advice associated with that insight. Although, Kaler refers to analyzing the performance of a distributed data processing system with multiple machines (see Fig. 2), this refers to a globally distributed system. Basically, Kaler allows the user to understand and analyze complex distributed applications, not withstanding that the machines on which they are running may be thousands of miles apart and not withstanding that the developer may not have access to source code for the underlying software upon which his or her application is running. <u>Kaler</u>, column 11 lines 13-19. <u>Kaler</u> thus does not teach or suggest a methodology for analyzing the performance of the same software as run on multiple systems, but rather is aimed at analyzing the performance of distributed applications where different machines are running different portions of the distributed

application. Accordingly, claim 1 is submitted as being neither anticipated or obvious in view of Kaler, for at least these additional reasons.

Any dependent claims not mentioned above are submitted as being neither anticipated or obvious for at least the reasons give in support of their base claims.

In sum, good faith attempt has been made to explain why the rejection of the claims as originally filed is improper, and to present claims that properly recite other embodiments of the invention without introducing new matter.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: September 1, 2005

12400 Wilshire Boulevard Seventh Floor Los Angeles, California 90025

(310) 207-3800

**CERTIFICATE OF MAILING** 

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on September 1, 2005.

Erin Flunn

September 1, 2005